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Guidelines

Public health issues and health rendezvous for migrants from conflict zones in Ukraine: A French practice guideline



N. Vignier^{a,b,c,d,*}, V. Halley des Fontaines^e, A. Billette de Villemeur^e, F. Cazenave-Roblot^{a,e,g}, B. Hoen^{e,h}, F. Chauvin^e, D. Lepelletier^{e,f}, C. Chidiac^{e,i}, E. Billaud^{e,f}

- ^a Société de pathologie infectieuse de langue française, Paris, France
- ^b Centre d'investigation clinique Antilles-Guyane, CIC INSERM 1424, DRISP, centre hospitalier de Cayenne, Cayenne, French Guyana
- ^c Centre hospitalier universitaire Avicenne, AP–HP, hôpitaux universitaires Paris Seine-Saint-Denis, université Sorbonne Paris Nord, UFR SMBH, Bobigny, France
- ^d Institut convergences et migration, Aubervilliers, France
- e Haut Conseil de la santé publique, Paris, France
- ^f Centre hospitalier universitaire de Nantes, Nantes, France
- g Centre hospitalier universitaire de Poitiers, Poitiers, France
- h Institut Pasteur de Paris, Paris, France
- ⁱ Centre hospitalier universitaire de Lyon, UFR de médecine et maïeutique Lyon Sud, université Claude-Bernard–Lyon 1, université de Lyon, CIRI PHE3ID Inserm U1111, UMR5308–ENS Lyon, Lyon, France

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ABSTRACT

Given the number of people leaving the war zone in Ukraine and arriving in France, the French high council for public health (HCSP) has drawn up a number of recommendations. The experts have taken into account the vulnerability of migrant populations, which is exacerbated by (a) promiscuity that increases the risk of exposure to infectious agents; (b) the psychological consequences of conflict, family separation and exile; (c) prevalence in Ukraine of communicable diseases such as (possibly multi-resistant) tuberculosis, HIV and HCV; (d) low vaccination coverage (risk of circulation of poliovirus) and (e) the risk of spreading infectious diseases (Covid-19, measles...). Consequently, experts recommend that priority be given to: (i) Initial (immediate) reception, which will help to provide emergency care and to assess immediate needs (psychological disorders, risk of medication breakdown and risk of infection); (ii) Other priority measures (vaccination catch-up, including vaccination against SARS-CoV-2 and mandatory vaccination for children's entry into school, screening for post-traumatic stress disorder and tuberculosis) must be implemented as soon as feasible. At this stage, it is imperative: To ensure coordination and access to information throughout the country, by providing medico-social support (opening of social rights and access to care); To digitize medical data for the purposes of traceability; To use professional interpreting and/or health facilitators, or else, if necessary, digital translation tools, (iii) Finally, experts stress the need for vigilance in terms of management, conservation of social rights and continuity of care after the initial period, and organization of a "health rendezvous" within four months of a migrant's entering the

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1. Introduction

In its referral of 15 March 2022, the Directorate General for Health (Direction Générale de la santé, DGS) of the French Ministry of Health asked the High Council for Public Health (Haut Conseil de

Adresse e-mail: dr.vignier@gmail.com (N. Vignier).

la santé publique, HCSP) to update its statement of 6 May 2015 [1] on the medical examination of migrants arriving from foreign countries, by issuing recommendations adapted to the health situation of people leaving conflict zones in Ukraine.

Several million people have left Ukraine since Russia's military actions began on 24 February 2022. With the continuation of the conflict, the arrival of migrants in European countries could continue to be intensified.

The DGS wishes to have the HCSP's recommendations on public health actions to be applied for all Ukrainian migrants, whatever their age: identification of health issues, monitoring of major

^{*} Corresponding author at: Centre d'investigation clinique Antilles-Guyane, CIC INSERM 1424, DRISP, centre hospitalier de Cayenne, route des Flamboyants, 97300 Cayenne, French Guyana.

pathologies, screenings as a key priority, vaccinations according to a specified schedule, establishment of traceability procedures (and action to be taken)when they cannot be fully documented, all of these in line with the recommendations of European Centre for Disease Prevention and Control (ECDC) and World Health Organization (WHO) regional office for Europe (Ukraine is part of the WHO European region but is not the European Union) [2,3]. It is likewise of prime importance to call upon the respective fields of expertise of the French Infectious Diseases Society (Société de pathologie infectieuse de langue française, SPILF), the French Public Health Society (Société française de santé publique, SFSP) and the High Authority for Health (Haute Autorité de santé, HAS) [4].

2. Methodology

To respond to this referral, the HCSP has set up an ad hoc working group involving experts who may or may not be members. Literature data were analyzed and experts and representatives from the national public health agency (Santé publique France, SPF), DGS, HAS and SPILF were interviewed. Practical guidelines were developed by the working group. Several meetings were held between 16 and 23 March 2022. Since relevant publications were few and far between, a rigorous methodology such as systematic review of the literature could not be applied. The present guidelines are therefore an expert statement based on available evidence, which has been published online in French by the HCSP [5].

3. Recommendations

The experts took into consideration the following aspects below.

3.1. The international situation and the arrival of migrants from Ukraine on French soil

Even though the French government provides figures on the arrival of people from Ukraine, it is currently difficult to identify the demographic structure and arrival mode (flows, means of transport, dispersion in the French departments, private or public reception structures, etc.). In addition, many individuals have welcomed at a distance from organized support and information on access to rights and care. While unquantified information is often given on the ages of the migrants (young women, children, elderly), their health conditions (illness, disability) are less frequently indicated.

In 2019, according to official figures, Ukraine had a population of 43,994,000, of whom 2,184,000 were children under the age of 5 (5%) and 7,012,000 were under 15 (15.9%). People aged 65 and over represented 16.5% of the population. It is important to note that while Ukrainian is the official language, Russian is spoken by a substantial part of the population, especially in the southern and eastern regions.

In the current conflict (Russian army offensive), men have been invited or forced to stay in Ukraine to join the army. According to the United Nations refugee agency (UNHCR), as of 15 March 2022 [6] a large part of the population, 3,063,095 people, was displaced and more than half of them were in Poland [7].

Migrant women who enter the EU/EEA from Ukraine may be vulnerable to certain infectious diseases, particularly due to their temporary living conditions and their situation while moving. The "temporary protection" system instituted by the European authorities and introduced in France for people from Ukraine (see below), allows them to benefit from the same level of protection as the host country's population in terms of prevention and control measures for infectious diseases, including those that can be prevented by routine vaccination. However, they may be subject to specific risks due to increased incidence of various infectious diseases in their

country of origin, disrupted living conditions prior to and during displacement, and possible sequelae of trauma. Other obstacles to accessing health care in France include inadequately availability of appropriate resources in the host territories and the language barrier.

3.2. The 6 May 2015 HCSP recommendations concerning the health check-up of migrants arriving from foreign countries [8]

It is recommended that a "health rendezvous" be systematically organized for all newly arrived migrants within at most 4 months after arrival and that it be separated from any control function. Subject to medical confidentiality, this appointment is designed to provide information, prevention, screening, guidance, and integration into the mainstream healthcare system. It is intended for people arriving through family immigration, workers, asylum seekers, students, and schoolchildren, whatever their geographical origin, including from countries outside the European Union. In addition to systematically provided information (healthcare system access, organization, and operation, care coverage, women's health, health and protection of minors), it includes systematic screening and others tests adapted to the migrants' situation.

3.3. The 8 June 2018 DGS/SP1/DGOS/SDR4/DSS/SD2/DGCS/2018/143 directive [9].

This French ministerial directive specifies that the purposes of the "Health Rendezvous" are (a) to manage chronic noncommunicable diseases; (b) to detect vulnerabilities caused by the migration process, particularly psycho-trauma and sexual violence; (c) to screen for diseases that are more prevalent in the countries of origin; (d) to consider the exacerbated fragility associated with some situations, particularly among pregnant women and children; (e) to compensate for a lack of knowledge of the healthcare system and administrative procedures, as well as a lack of proficiency in the French language.

The directive is also aimed at constructing health pathways adapted to the concerned territories by coordinating the local offer and guaranteeing access to a "health rendezvous".

In this context, the transmission of information to newly arrived migrants is of major importance in access to care. With this in mind, it is necessary to have a map of the medical and medico-social structures and other services mobilized throughout France for the care of migrants and to make them known to professionals. Mapping consists in an operational directory of resources, to which access is limited for the time being to users registered with regional ehealth development support groups or regulation platforms. Other information tools for health professionals and individuals should be made available on shared workspace, one of them being the updated version of the bilingual health booklet drawn up by the NGO Comede (Committee for the health of exiles) and the French national public health agency (SPF); further information is available on the French health insurance website and the SPF websites [10].

3.4. Special conditions for migrants from Ukraine

Having arrived in France, people from Ukraine have the right to stay in France for 90 days without going through administrative procedures. On March 4, 2022, the Council of the European Union decided to apply Directive 2001/55/EC to Ukrainian nationals (and their rights holders), refugees and stateless persons, as well as third-country nationals who were residing in Ukraine before February 24, 2022, as holders of a long-stay resident permit, and who are unable to return to their country of origin. On the other hand, Ukrainian nationals who were legally resident in France before February 24, 2022 cannot benefit the above provisions. This

 Table 1

 Vaccine-preventable diseases of particular importance in the context, prevalence and coverage in Ukraine.

Disease	Number of cases				Vaccination	
	2018	2019	2020	2021	Туре	Vaccination coverage 2020
Covid-19	NA	NA	1,074,093	3,676,342		35% (23/02/2022)
Diphtheria	10	0	0	0		81.3%
H. influenzae type B	NA	NA	NA	NA	3rd dose	85.2%
Hepatitis B	NA	NA	NA	NA	3rd dose	80.9%
Measles	53,219	57,282	264	16	2nd dose ^a	81.9%
Meningitis	271	299	137	91	NA	NA
Mumps	502,027	169,799	269,630	175	NA	NA
Pertussis	2214	2314	1041	NA	3rd dosea	81.3%
Pneumococcus	NA	NA	NA	NA	NA	NA
Poliomyelitis	0	0	0	2 ^b	3rd dose	84.2%
Rubella	235	138	36	20	1st dosea	84.9%
Tetanus	19	15	12	7	3rd dose	81.3%
Tuberculosis	NA	NA	NA	NA	BCG	92.7%

Source: WHO Ukraine crisis. Public Health Situation Analysis -Refugee-hosting countries, 17 March 2022.

status is effective for one year, allowing its beneficiary to obtain a residence permit (in France, a temporary residence permit under temporary protection does not award refugee status), to have the right to work and to enjoy untrammelled access to social rights (health insurance and supplementary coverage with no waiting period, family support, etc.). While it is not compulsory to apply for asylum to be granted this status, the person who wishes to do so continues to benefit from temporary protection while their asylum application is being examined. To apply for temporary protection, it is necessary to contact a state representative at the departmental level (in France, the prefecture). Reception centers have been organized in some regions to facilitate access to the right to residence, which usually includes rights to health insurance coverage by the national health insurance scheme. The regional health agencies (Agences régionales de la santé, ARS) have been asked to provide support on arrival, in terms of both psychological care and general medicine.

Provision to the national health insurance agency of a certified copy of the resident permit leads to affiliation to both basic and complementary health insurance (Complémentaire Santé Solidaire, CSS), free of charge and without either a prerequisite concerning activity or residence, or the three-month waiting period applied to asylum seekers. French nationals repatriated from Ukraine or Russia likewise benefit from full coverage. Once a valid identity document has been provided, registration with a national directory registration number (NIR = Numéro d'Immatriculation au Répertoire de l'INSEE) and a health insurance card (Carte vitale), or a provisional registration number (Numéro d'Immatriculation d'Attente) will be issued.

For children, several situations are possible:

- they are accompanied by their parents or legal guardians:
 - if an identity document attesting to the link with the legal representatives is available: certificate as a beneficiary,
 - if an identity document proving the link is not available, form S3705 to be completed for registration as a beneficiary;
- they are not accompanied by their legal representatives but are referred to families: registration as an ADCA beneficiary is possible (ascendant, descendant, collateral or allied, ACDA);
- they are not accompanied or accommodated by relatives: care by the child welfare services (Aide Sociale à l'Enfance).

As Ukraine is at war and much of the population has witnessed the fighting or bombardment and been uprooted or separated from their families, the risk of psychological trauma

and its repercussions in terms of short or long-term mental health (anxiety, post-traumatic stress disorder and mood disorders) are likely to be at the forefront of care needs. In this context, medical-psychological emergency units (Cellules d'urgence médico-psychologique, CUMP) have been activated, and mobile psychiatry security teams (Equipes mobiles psychiatrie précarité, EMPP) and medical-psychological centers (Centres medico-psychologiques, CMP) remain closely involved.

In addition, in the MINSANTE 2022-22 ministerial document on the organization of care for migrants arriving from Ukraine, the French Ministry of Solidarity and Health indicates that as mentioned in MINSANTE 2022-21, the care system must take into account the Covid-19 risk by organizing (a) Covid-19 screening, particularly in the case of collective accommodation; (b) Covid-19 (primary and booster) vaccination; (c) verification of childhood vaccinations (in particular MMR and BCG), and organization of booster vaccinations in line with the vaccination calendar; (d) prevention of tuberculosis by remaining alert to any signs of the disease, with when necessary; (e) organization of care and treatment for other chronic diseases, when necessary; (f) organization of specialized consultations, and provision of medical and psychological care, with follow-up for those in need. The expected presence of many women and children to be is underlined.

Attention has been given to the risk of rabies risk for any migrants arriving with a pet and the importance of anti-rabies vaccination for these animals for (coverage in Ukraine is low). An information document in Ukrainian is available online [11].

The need for professional health care translating is recalled and the challenges of its organization are underlined. The need to involve prefectures, local authorities, NGOs and the regional unions of health professionals likely to be the first contact for people who have arrived by their own means is likewise highlighted.

3.5. Vaccination status of people from Ukraine

The prevalence and coverage of vaccine-preventable diseases in Ukraine are detailed in Table 1. The Ukrainian immunization schedule [12,13] is different from the one used in France and should be made available and consulted when assessing vaccine status. The relevant information is detailed in Table 2 and Supplementary files 1, 2 and 3. For people arriving from Ukraine but originally coming from another country (students), the vaccination schedule and the vaccination coverage of that country are also available on the WHO website [12].

a Combined vaccines.

^b In 2021, two cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported, resulting in flaccid paralysis. Nineteen contacts were identified as infected with the virus but did not develop paralysis.

Table 2 Vaccination schedule in Ukraine.

Vaccine	Schedule		
BCG (Bacillus of Calmette and	3 days		
Guerin)			
DT (Diphtheria, Tetanus)	6 years		
DTwP (Diphtheria, Tetanus,	2, 4, 6, 18 months		
whole Pertussis)			
DTwPHibHepB (Diphtheria,	2 months		
Tetanus, whole Pertussis,			
Haemophilis influenzae B,			
Hepatitis B)			
HepB_pediatric	1 day, 2, 6 months		
HIB (Haemophilis influenzae B)	2, 4, 12 months		
Influenza_Adult	>60 years		
Influenza_Pediatric	6-48 months; 5-17 years		
IPV (Injectable Polio Vaccine)	2, 4 months		
MMR (Measles Mumps	12 months, 6 years		
Rubella)			
OPV (Oral Polio Vaccine)	6, 18 months; 6, 14 years		
Td (Tetanus, diphteria)	16, 26, 36, 46, 56, 66 years		

Source: WHO vaccine schedule.

With epidemiological findings in mind and in the absence of documented evidence of previous vaccination, the ECDC [2,14] recommends prioritizing the vaccinations against Covid-19, MMR, DTP-IPV/dTp-IPV and HiB; and suggests consideration of the vaccinations against HBV, meningococcal, pneumococcal, chickenpox, influenza and tuberculosis.

3.6. The SPILF/HAS guidelines on catch-up vaccination for newcomer migrants, in the event of unknown, incomplete or incompletely known vaccination status [15]

General rules for catch-up vaccination have been established and highlight the following points:

- any previous vaccinations without proof of vaccination are disregarded;
- the absence of danger in administering vaccines to a person who may already be immune to this disease, enabling the indication for catch-up vaccination in case of unknown status;
- a minor infection or low-grade fever should not delay catch-up vaccination. Febrile illness (> 38°) or a moderate or severe acute infection does not contraindicate vaccination but may lead to a delay of a few days;
- definitive medical contraindications to vaccination are extremely rare (severe allergy from a previous injection of a particular vaccine).

However, in the context of Covid-19 vaccination, certain adverse effects of Covid-19 vaccines, such as myocarditis in young subjects, should be considered.

3.7. Epidemiology of communicable and non-communicable diseases in Ukraine

The epidemiology of communicable infectious diseases is summarized here and has been detailed in the ECDC report "Prevention and control of infectious diseases in the context of Russia's aggression towards Ukraine" [14].

3.7.1. The epidemiological situation in Ukraine of the SARS-CoV-2 pandemic

According to the ECDC, since the start of the Covid-19 pandemic and up until 2 March 2022, a total of 4,849,022 confirmed SARS-CoV-2 infections and 106,239 Covid-19 deaths had been recorded in Ukraine. The emergence of the Omicron variant of

concern resulted in the fourth and largest wave of SARS-CoV-2 transmission in the country, which recorded its highest 7-day average daily case rate of 35,978 cases on 10 February 2022. Although the number of sequences submitted to the GISAID-EpiCoV database in recent weeks has been very limited, the available sequence data indicate that Omicron is currently the main circulating variant. Two-dose vaccination coverage is low among the Ukrainian population (35.6%) and booster shots as of February 16, 2022 [16] were almost non-existent (1.7%). It was 79.1% at the end of 2021 among health professionals, 30.6% for those aged 60 and over, and vaccine hesitancy is common although lower than in France [14]. Vaccine uptake is uniformly low in the adult age groups, including the over-60s, who are most at risk of severe disease. As of August 2021, nearly 56% of Ukrainians were hesitant about vaccination against Covid-19 [17,18]. Vaccination intention may subsequently have improved in view of the number of deaths recorded in Russia [19]. SARS-CoV-2 is therefore likely to be actively circulating among migrants from Ukraine and if they have risk factors, they are unlikely to be effectively protected against the risk of infection and severe forms. Moreover, the vulnerability of migrant populations is linked to basic medical conditions and more specifically to migratory flows (promiscuity, confinement), which increase the risk of exposure to infectious agents. The ECDC report specifies general recommendations for vaccination against Covid-19 and indicates the need to comply with host country guidelines. In addition, to facilitate border crossings, some border countries (e.g. Poland, Romania and Slovakia) have reduced travel restrictions related to Covid-19.

Covid-19 screening tests are fully covered for migrants from Ukraine until 31st May 2022 [20].

3.7.2. Other vaccine-preventable diseases [12]

People arriving from Ukraine, especially children, may be more vulnerable to vaccine-preventable diseases; polio and measles should be considered priority diseases for monitoring and surveillance. The main warning signs are [13]:

- the low diphtheria vaccination coverage reported by WHO for some regions (19–81%);
- the occurrence of two recent cases of poliovirus, derived from a type 2 vaccine (PVVC2), and the low uptake of the mass immunization campaign (22%) suggest that polio immunization is the preferred option;
- the significant risk of a measles outbreak, given that vaccination coverage is insufficient and has been declining for some years in some Ukrainian regions. The last major outbreak occurred in 2019 [2];
- in a crowded environment, respiratory infections, including influenza, should be considered;
- difficulty in accessing water raises concerns about the occurrence of infections related to unsanitary conditions;
- chronic infectious diseases (HIV, hepatitis B or C, tuberculosis) require continuous treatment, which may have been interrupted during the transit weeks.

3.7.2.1. Poliomyelitis, tetanus, diphtheria. In Ukraine, vulnerability to polio remains high, especially for children under 6 years of age, mainly due to low immunization coverage. Infant immunization coverage against diphtheria, tetanus and polio (3 doses) was estimated in 2021 at 80% (40% of districts with coverage below 80%), a proportion that was stable compared to previous years, but which induces insufficient immunity against these diseases. Seroprotection levels, measured by a survey in 4 regions in 2017 among children aged between 2 and 11 years, were below 80% for diphtheria and variable for tetanus (from 62% to over 80% depending on the region) [21]. This situation has led to the recent occurrence, since September 2021, of several cases of poliomyelitis linked to

the circulation of a Sabin-like type 2 virus. These data are in favor of catching up children with at least MMR, dTP-IPV tetra, penta or hexavalent valences, depending on age. It should be noted that the extremely high level of vaccination coverage of the French population regarding poliomyelitis induces a negligible risk of cases linked to the vaccine virus.

3.7.2.2. Measles. Ukraine experienced a very large measles epidemic in the period 2017–2019 with more than 50,000 notified cases in 2018. The incidence of reported cases decreased significantly in 2020 and 2021 (264 cases in 2020 and 16 in 2021). However, infant measles vaccination coverage for the 2 doses remains sub-optimal, 92% in 2019 but lower between 2010 and 2016 (60%), indicating high receptivity among young children. In addition, the promiscuity in childcare facilities could favor transmission of the virus. This should be considered in light of the persistent vulnerability of the French population to the risk of a measles epidemic.

3.7.2.3. *Influenza*. Seasonal influenza is also still circulating and should be considered in a crowded environment. Low seasonal influenza vaccination coverage has been reported for the 2021–2022 season in Ukraine, with only 164,939 people vaccinated since the start of the current flu season [14].

3.7.2.4. Rabies. Media reports have described displaced Ukrainians as fleeing with their pets, and the European Commission has decided to relax procedures for regulation of non-commercial movement of pets within the EU [22]. It should be borne in mind that rabies is still endemic in wild animals, as well as in dogs and cats in Ukraine. In this context, the vaccination of pets should be checked and completed if necessary. In the event of a bite, advice from the nearest rabies center is called for.

3.7.3. Tuberculosis

Tuberculosis (TB) remains a major public health problem and a priority communicable disease in Ukraine. According to the 2021 European TB Surveillance and Monitoring Annual Report, based on 2019 data, Ukraine reported the second highest number of TB cases (28,539), with an incidence of 65 cases per 100,000 and a mortality rate of 7.3 deaths per 100,000. Ukraine is one of the 10 countries in the world with the highest burden of drug-resistant tuberculosis (DR-TB), and in 2019, Ukraine reported 27% of new cases of DR-TB (4,490 cases, 70% of which were male). Ukraine also has the second highest prevalence of HIV/TB co-infection (26%) in the World Health Organization (WHO) European Region (7800 cases in 2019) [2].

3.7.4. Other chronic infectious diseases

Chronic infectious diseases (HIV, chronic hepatitis B or C) may be undiagnosed and require continuous treatment, which may have been interrupted during the transit weeks.

3.7.4.1. HIV. According to the ECDC, HIV remains a public health issue and a priority communicable disease in Ukraine. According to the Annual European HIV Surveillance Report 2021, based on 2020 data, Ukraine reported 15,658 new HIV diagnoses. In 2020, the HIV diagnosis rate for Ukraine was the second highest in the WHO European Region (37.5 per 100,000 population), while the EU rate was 3.3 per 100,000 population. In 2020, an estimated 257,000 people in Ukraine were living with HIV. The number of HIV diagnoses in Ukraine is particularly high among injecting drug users (IDUs) and was increasing between 2018 and 2020. IDUs represented a 38% share of all new diagnoses in 2020. In that year, an estimated 146,000 people in Ukraine living with HIV were receiving antiretroviral drugs (57% treatment coverage), while in the EU, treatment coverage is estimated at 82%. [2].

3.7.4.2. VHB. Ukraine is an intermediate endemic area for chronic infection by hepatitis B virus. A study conducted in 2017 in Ukraine among a representative sample of children born between 2006 and 2015 found prevalence of HBsAg of 0.2% (8/4,596) and anti-HBc antibodies of 1.8% (81) [23].

3.7.4.3. HCV. Ukraine is an intermediate endemic area for hepatitis C. Intravenous drug use is widespread and contributes to the persistence of HIV and hepatitis C epidemics. It is estimated that between 2.5% and 5% of the Ukrainian population is living with chronic hepatitis C, which is higher than in the European Union, where prevalence is estimated at 1.5%. This high prevalence is partly explained by infections linked to intravenous drug use [24]. Infections are also reported in children through vertical transmission.

3.7.5. Non-communicable diseases

3.7.5.1. Chronic diseases. In 2016, according to the WHO, 9.1% of Ukrainians were diabetic, 51.7% were overweight and 21.7% obese. By comparison, in France in 2016, prevalence of diabetes, overweight and obesity was 8%, 64.1% and 25.7% respectively. Hypertension (BP > 16/9) affected 34.8% of the population and 11.1% had BP > 16/10. However, hypertension is not regularly monitored. A heart attack history was reported by 14% of the population (6.5% among 18–29-year-olds).

3.7.5.2. Addictions. Tobacco use affects 33.9% of Ukrainians. Two-thirds of men and half of women drink alcohol and almost one in five (19.7%) drink more than 6 glasses on a single occasion. Intravenous drug use is widespread and has contributed to the HIV and hepatitis C epidemics.

3.7.5.3. Maternal and child health. There were 10,223,000 women aged 15–49 (23.2%) and 408,000 births in 2019. Caesarean deliveries accounted for about a quarter of all deliveries in 2019; access may be limited in Ukraine and demand may exceed capacity in some host countries. Maternal mortality was 19/100,000 women in Ukraine (8 in France) in 2017.

3.7.5.4. Mental health. Exposure to war and forced displacement is likely to have a negative impact on the mental health of people fleeing the war in Ukraine. An exacerbation of chronic mental health problems and high levels of post-traumatic stress, depression and anxiety disorders are likely among the affected population, regardless of age.

3.8. Vaccination against Covid-19 in Ukraine

3.8.1. Vaccines available and used in Ukraine

The vaccines used in Ukraine or that may have been received by the Ukrainian population in Russia are mainly: mRNA-1273 (Spikevax-Moderna), BNT162b2 (Comirnaty-Pfizer-BioNTech), Ad26.COV2.S (Janssen-Johnson&Johnson), ChAdOx1-S (Vaxzevria-AstraZeneca-Oxford), ChAdOx1 nCoV-19 (Covishield) and Sinovac/CoronaVact [25]. In addition, the Russian adenoviral vaccine Gam-COVID-Vac (Sputnik V) could be received by part of the Ukrainian population. The vaccines used were either purchased by the Ukrainian government through the Covax program or supplied by Russia. In January 2022, UNICEF sent 999,000 doses [26].

3.8.2. Certificate of vaccination against Covid-19

The EU digital Covid-19 certificate with QR code is available in Ukraine, but only a minority of the population has been vaccinated, and not all of those vaccinated have received the QR code. In

addition, many people have fled Ukraine without taking their medical documents with them. Aside from the digital certificate, their certificates are not written in French or English.

3.9. Nationwide Covid-19 vaccination recommendations

3.9.1. Vaccination schemes in France

The schemes are specified in DGS-Urgent No. 2022-28 [27] which is based on the regulatory texts and statements of the HAS and the Conseil d'orientation de la stratégie vaccinale (COSV) [27–31].

3.9.2. Primary vaccination schedule

A full primary vaccination schedule is still required, i.e.:

- a two-dose primary immunization schedule, regardless of the vaccine used, respecting the spacing between injections specific to each vaccine (Supplementary file 4);
- a single-dose primary vaccination schedule if infection occurs before or after the first injection.

3.9.3. Recall schemes

The validity of the doses and history of infection is recalled in Supplementary file 4 in accordance with the COSV notice [32].

3.9.4. Validity and finalization of vaccination schedules for those vaccinated abroad [33]

People who have received two doses of an EMA-recognized vaccine (Comirnaty, Spikevax, Vaxzevria or one dose of Janssen) or an "EMA-like" vaccine (Covishield, R-Covi and Fiocruz, whose composition and manufacturing process are similar to those of the Vaxzevria vaccine) abroad, benefit from a complete vaccination scheme recognized by France.

People who have received a single dose of a vaccine not recognized by the EMA but which has obtained the WHO Emergency Use Listing (EUL) label (Sinopharm (Beijing Institute of Biological Products or BIBP), Sinovac and COVAXIN) must receive two doses of an mRNA vaccine in France, at least 4 weeks after their last injection, in order to complete their vaccination schedule and thereby obtain the health pass. Persons who have received two or more doses of these vaccines must receive a dose of mRNA vaccine in France, at least 4 weeks after their last injection, to complete their vaccination schedule and consequently obtain a health pass.

People who have received one or more doses of a vaccine not recognized by the EMA and who have not obtained the WHO EU label must receive two doses of an mRNA vaccine in France, at least 4 weeks after their last injection, to complete their initial vaccination schedule and thereby obtain their vaccination certificate (for more information, see DGS-Urgent n°2021_125 of December 07, 2021).

3.10. Considering

The following have been considered:

- the language barrier;
- the likelihood of several waves of arrivals of migrants from Ukraine of different health status;
- the possible arrival of sick people from Ukrainian hospitals;
- the need to ensure access to information, care and prevention for migrants from Ukraine, and for the elderly, pregnant women, and children in particular;
- the prevalence of certain communicable diseases in Ukraine;
- the difficulty of having a traceable medical history;

- low vaccination coverage for various contagious diseases (Covid-19, poliomyelitis, tuberculosis, measles, etc.);
- the risk of suspended monitoring of chronic illnesses for some of the displaced persons;
- the expected psychological consequences of conflict and exile;
- the need to organize a "health rendezvous" as soon as possible after the arrival of migrants in French territory;
- the importance of health pathway traceability in host countries;
- the need to inform foster caregivers about care needs and health risks.

3.11. The experts recommend

The experts recommend the following:

- that all the recommendations from the different institutions, learned societies and agencies and the applications planned by the host structures be made available on a single website;
- that information on access to care throughout the host countries be provided and coordinated;
- that medical and social support (opening of social rights and access to care) be provided;
- that computerization of medical data ensuring their traceability be achieved as soon as feasible;
- that the "health rendezvous" detailed in the 2015 recommendations and recently updated (Table 3) be implemented;
- that there be a single digital portal for accessing information (including documents translated into bilingual French Russian, French Ukrainian) (Supplementary file 5);
- that professional interpreting and/or health facilitators be put into work, and that if they are not available, digital translation tools be used:
- that host families be provided with practical and understandable information on the risks of infection and on the orientation and care of the persons accommodated;
- that teaching of the French language be initiated for all age groups.

3.11.1. Concerning initial (immediate) reception, upon arrival in the country

- Emergency care: detecting signs suggestive of a communicable infectious disease (cough, fever and/or diarrhea); assessing immediate needs (violence experienced, imperiled mental health); identifying conditions requiring uninterrupted medication (diabetes, anticoagulant, contraception, etc.); compensating for the loss of medical devices (glasses, hearing aids, etc.); ensure access to sanitary towels and infant formula.
- Organizing pregnancy monitoring for pregnant women.
- Organizing immediate care for infants in a maternal and child protection center (PMI), with a special focus on tuberculosis prevention (screening and BCG vaccine).
- Grouping together the relevant administrative regularization procedures (temporary residence permit in the context of temporary protection, health coverage, accommodation) for migrants, ideally in a single place and via a simplified and coherent pathway, with the help of social support operators.
- Raising awareness of physical and mental health issues among professionals in reception facilities and among people receiving persons arriving from Ukraine.

3.11.2. Concerning the measures to be implemented as a matter of priority

 Catch-up on vaccinations against Covid-19 (see details in §3.9), and the main communicable diseases, particularly diphtheria,

Table 3

Contents of the "Health Rendezvous".

General clinical examination by a physician including systematic detailed interview with

Search for a history of physical and mental violence and their consequences on health (after-effects of abuse, depression, post-traumatic syndrome, etc.); Search for situations of sexual vulnerability

Search for sleep disorders, anxiety syndrome, mood disorders and/or post-traumatic stress disorder

Full clinical examination with blood pressure measurement

Collection of the patient' personal (known) medical history, particularly allergies, and consumption of tobacco, alcohol and drugs, especially intravenous drugs, and the search for current treatment

Assessment and updating of immunization status

In complex situations, this assessment may be entrusted to referral structures or professionals

Tuberculosis screening

Tuberculosis screening is the task of Tuberculosis centers (Centres de lutte anti-tuberculeuse, CLAT). The CLAT's mission is to refer people with the disease to a care facility, to organize any screening among family and friends, and to arrange distance visits for people who are not infected. For young children, CLATs may entail a specialized hospital consultation

Expert statement on the modalities of tuberculosis screening

Screen for TB disease by looking for suggestive symptoms and performing a routine chest X-ray as soon as possible in accordance with the ECDC recommendations on screening for TB in migrants [34,35]

Screening for latent tuberculosis infection (LTI) by IGRA test or tuberculin TST in all children up to the age of 18 in accordance with the HCSP statement. IGRA tests are currently reimbursed only for minors under 15 years of age and can be performed free of charge in CLATs [36]

In the absence of LTI and BCG vaccination, catch-up BCG vaccination will be carried out as a priority for children under 5 years of age and if possible, up to

15 years of age in accordance with the French vaccination calendar

HIV, HBs, HCV testing

In addition to the standard serologies that can be performed as part of a blood test, rapid diagnostic tests (RDTs) for HIV, HBs antigen and HCV are encouraged, as they allow early access to screening and prevent the risk of non-return of results

Other tests to consider

Fasting capillary or blood glucose tests for people over 45 years of age

Performing a CBC, creatinine and transaminases

Syphilis serology if risk factors

Chlamydia/gonococcus PCR in urine or by routine vaginal self-sampling for sexually active persons under 25 and if risk factors for others

Tetanus and HBs antibodies 4-8 weeks after a booster vaccination if indicated and if vaccination status was unknown

Screenings organized according to national recommendations (cervical smear or HPV PCR, mammography, blood in stool test)

tetanus, polio and measles (MMR) (according to current recommendations).

- Priority must be given to children for entry into school, effective from the moment of their arrival on French territory. Screening and "health rendezvous" should not be prerequisites for admission to school.
- Screen for symptoms that may suggest Covid-19, influenza or tuberculosis and perform an early chest x-ray to detect TB disease.
- Screen for the risk of post-traumatic stress disorder, suicidal risk, and possible violence and organize early psychological support.
 Remain vigilant for early signs of decompensation of psychological disorders that may be due to the context or to discontinuation of a drug treatment.

3.11.2.1. Concerning vaccination in general.

- Provide health professionals with a translation of the Ukrainian vaccination schedules and booklets.
- Provide clear and understandable information on the purpose of vaccination and the entire course of medical, social and preventive care.
- Provide and disseminate translated documents with crosstranslations concerning vaccine recommendations in France.
- Consider possible reluctance to vaccinate, cultural or religious beliefs or social representations.
- Carry out a catch-up vaccination (for all ages) as soon as possible after entering the country and within an optimal period of 4 months after arrival on the occasion of the "health Rendezvous", referring to the HAS/SPILF recommendations on catch-up vaccination in case of unknown or incompletely known vaccination status [11].
- For people with unknown vaccination status or incomplete vaccinations, priority should be given to catching up with the dT-IPV/dTP-IPV/DTP-IPV/DTP-IPV-Hib according to age, and MMR for people aged at least 1 year and born after 1980. The co-administration of these vaccines is possible within the limits of the person's acceptability and the number of 4 injections per visit.

- In the absence of a vaccine scar, BCG vaccination should likewise be scheduled according to age. If the woman declares that she is not pregnant, the MMR vaccine can be administered without a prior pregnancy test.
- For people who are up to date with their vaccinations (Ukrainian calendar), schedule additional vaccinations and booster shots according to the French vaccination calendar. Meningococcal C, pneumococcal conjugate and HPV vaccinations are not included in the Ukrainian vaccination calendar and must be caught up for all children and young adults in accordance with the French vaccination calendar.
- Ensure the traceability of all vaccinations, ideally in a health booklet, making it possible to fill in the various elements of the "health rendezvous".

3.11.2.2. Regarding vaccination against SARS-CoV-2.

- Ensure verification and catch-up vaccination against COVID 19, including booster shots, in conjunction with other prevention activities.
- Document a history of Covid-19 (RT-PCR or antigenic test results, or serology with anti-N antibodies) and vaccination history (proof of vaccination, type of vaccine, dates, or notion of vaccination without proof in cases of positive SARS-CoV-2 serology):
 - for migrants with a documented history of infection and/or vaccination, apply the recommendations in force on the national territory (according to paragraph 3.9);
 - for migrants for whom no information is available, or with a history of vaccination with a vaccine not recognized in France (or by the European Union), or in the absence of proof of vaccination, propose that a TROD SARS-CoV-2 be performed:
 - in case of positivity, administer a single dose of mRNA vaccine,
 - in case of negativity, or refusal of TROD, propose a complete vaccination scheme.
- In all cases, schedule the necessary booster shots according to the vaccination schedule in force in France.

 Make sure that all those involved in vaccination against Covid-19 be able to update the health/vaccination pass, thereby attesting to the vaccinations received abroad.

3.11.2.3. The HCSP confirms the following points from its 2015 recommendations on the reception of newcomers, whatever their origin, and recommends.

- Vigilance in the management and continuity of rights and care after the initial period has been completed.
- A "Health Rendezvous" should be organized within four months of entry into the country, during which the following information is systematically provided:
 - the principles of health care in France: universal access to health care, medical confidentiality, equal rights, especially between men and women, consent to care, free choice of doctor,
 - the operating rules of public service ensured by health professionals of both sexes with the same missions,
 - the terms of coverage of care (health insurance, complementary health insurance, etc.),
 - perinatal monitoring (maternal and child protection service -PMI), the integrity of the body, access to contraception, the right to abortion, prevention of intra-family violence, screening for gynecological cancers, etc.,
 - health and protection of children and minors: compulsory vaccinations, recommended visits, PMI, child protection service, school health service, etc.
- In addition to the booklet already available in Russian and French, a bilingual health document from Comede NGO and National Public Health Aging in Ukrainian and French should be accessible, on easily identifiable websites.
- The medical contents of the "health rendezvous" must be in conformity the nationwide system of reference, as detailed in Table 3.
- At the end of this "health rendezvous", a document ensuring health pathway traceability is issued, mentioning the examinations performed and the person's vaccination status. Development of digital health space should be prioritized.
- The data collected and anonymized during this "health rendezvous" may be used for epidemiological purposes.
- Above and beyond the assistance provided in accessing care, particular attention should be paid to the absence of any discrimination related to gender, sexual orientation and origin.

Drawn up on the basis of the knowledge available at the date of publication of this statement, these recommendations may change as overall knowledge and epidemiological data are updated.

Statement written by a group of experts, members or non-members of the High Council for Public Health.

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Authors' contributions

D.L. and C.C. coordinated the working group. E.B., A.B.D.V., V.H., C.C. and N.V. developed the guidelines, and drafted the recommendations. E.B., A.B.D.V., V.H., F.C., B.H., D.L., C.C. and N.V. participated in the working group, contributed to drafting the recommendations, reviewed the draft recommendations, and made recommendations for harmonization with existing recommendations. All authors reviewed and approved the recommendations.

Ethical statement

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Disclosure of interest

The authors declare that they have no competing interest.

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